IN THE TITLE:

Please ~~amend~~ the title to read as follows:

--IMAGE HEATING APPARATUS HAVING A LIMITING MEMBER--.

IN THE SPECIFICATION:

Please amend the paragraph beginning at page 7, line 18 and ending at page 8, line 19, as follows.

--Thus, as the pressure roller 30 is rotationally driven, the sleeve 10 is rotated around the sleeve guiding member ~~16~~ 16c, while current is supplied to the exciting coil 18 from the exciting circuit. As a result, heat is generated in the sleeve 10 through electromagnetic induction, increasing the temperature of the fixing nip N to a predetermined level, at which it is kept. In this state, a recording medium P, on which an unfixed toner image t has been formed, is conveyed to the fixing nip N, or the interface between the sleeve 10 and pressure roller 30, with the image bearing surface of the recording medium P facing upward, in other words, facing the surface of th fixing sleeve. In the fixing nip N, the recording Medium P is conveyed with the sleeve 10, being sandwiched between the sleeve 10 and pressure roller 30, the image bearing surface of the recording medium P remaining flatly in contact with the outwardly facing surface of the sleeve 10. While the recording medium P is conveyed through the fixing nip N, the recording medium P and the unfixed toner image t thereon are heated by the heat generated in the sleeve 10 by electromagnetic induction. As a result, the unfixed toner image t is permanently fixed to the recording medium P. After being passed through the fixing nip N, the recording

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medium P is separated from the peripheral surface of the rotating sleeve 10, and then, is conveyed further to be discharged from the image forming apparatus.

Please amend the paragraph beginning at page 8, line 20 and ending at page 9, line 8, as follows.

--An electromagnetic induction heating type fixing apparatus employs thin metallic film (Ni film, SUS film, or the like), or an approximately 50 μm thick metallic film, as the material for the sleeve 10. Therefore, the sleeve 10 is relatively rigid. Thus, an electromagnetic induction heating type fixing apparatus has suffered from the following problem. That is, as the sleeve 10 is rotationally driven around the sleeve guiding member ~~16~~ 16c, the lengthwise end portions of the sleeve 10 come into contact with the side plates or the like of the fixing apparatus, sometimes buckling due to the contact. Eventually, the lengthwise end portions of the sleeve 10 crack, sometimes resulting in the destruction of the sleeve 10, because of its relatively high level of rigidity.

Please amend the paragraph beginning at page 9, line 17 and ending at line 25, as follows.

--As for the countermeasure for the ~~above-described~~ above-described problem, in other words, a means for preventing the edges of the sleeve 10 from rubbing against the members of the fixing apparatus adjacent to the edges of the sleeve 10, it is possible to provide the fixing apparatus with a flange 201, the flange 201 having a diameter r1 slightly smaller than the inner diameter r2 of sleeve 10, as an edge protection member, which is disposed at the edges of the sleeve 10 and rotates with the sleeve 10, as shown in Figure 21.

Please amend the paragraph beginning at page 12, line 16 and ending at line 18, as follows.

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--~~Figure 8~~ Figures 8(a) and 8(b) are schematic sectional ~~view~~ views of the sleeve of the fixing apparatus in the first embodiment, and show ~~shows~~ the structure thereof.--

Please amend the paragraph beginning at page 19, line 20 and ending at line 26, as follows.

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--Normally, the transfer roller ~~107~~ 106 is not kept in contact with the intermediary transfer drum 105; it is kept pressed against the intermediary transfer drum 105, with the interposition of the transfer medium P, only while the color toner images are transferred (secondary transfer) from the intermediary transfer drum 105 onto the transfer medium P.--

Please amend the paragraph beginning at page 24, line 10 and ending at line 20, as follows.

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--Flanges 23a and 23b (Figures 3 and 4) are rotationally attached to the lengthwise ends, one for one, of the assembly made up of the sleeve guiding members 16a and 16b, while being regulated in terms of their movements in the lengthwise direction of the sleeve 10. While the sleeve 10 is rotated, the flanges 23a and 23b catch the sleeve 10 by its edges, regulating thereby the movement of the sleeve 10 in the direction parallel to the lengthwise direction of the sleeve 10. The flanges 23a and 23b will be described in more detail later~~, in Section D~~.--

Please amend the paragraph beginning at page 49, line 17 and ending at page 50, line 9, as follows.

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--The flange 23b in Figure 15 is provided with a supporting portion 50 for catching and bracing the end portion E of the sleeve 10 by the peripheral surface, that is, a portion, the internal surface of which opposes the peripheral surface of the end portion of the sleeve 10, and a supporting portion 51 for catching the actual edge of the sleeve 10. The sleeve 10 has a certain amount of lengthwise play in the fixing apparatus, and never fails to shift toward the left or right flange 23a or 23b, coming into contact therewith. Therefore, the sleeve 10 is subjected to the reactive force from the edge catching portion 51 of the left or right flange 23a or 23b. The direction in which the sleeve 10 shifts is determined by the circularity of the sleeve 10 and pressure roller 30, pressure balance, alignment between the sleeve 10 and pressure roller 30, and the like factors. Figure 15 shows the case in which the sleeve 10 has shifted right, and has come into contact with the right flange 23b.--

Please amend the paragraph beginning at page 55, line 11 and ending at page 56, line 24, as follows.

--In comparison, in this embodiment, the fixing apparatus is provided with an end holder 42b ~~(42a)~~, which is engaged with the flange 23b ~~(23a)~~ as shown in Figure 17. Although Figure 17 shows only the holder 42b for the right flange 23b, the fixing apparatus is also provided with a holder (referred to herein as holder 42a) ~~42a~~ for the left flange 23a. The end holder 42b is solidly fixed to the rigid pressure application stay 22 (which is directly fixed to the sleeve guiding members 16a and 16b as shown in Figure 16, or indirectly fixed to the sleeve guiding members 16a and 16b with the interposition of the highly heat conductive member 40), with the use of small screws 43 or the like. In other words, the sleeve guiding members 16a and 16b and end holder 42a and 42b are solidly secured to each other, with the interposition of the

rigid pressure application stay 22. Consequently, not only is the position of the sleeve 10 regulated by the sleeve guiding members 16a and 16b, but also it is regulated by the end holders 42a and 42b, with the interposition of the flanges 23a and 23b, at the lengthwise ends. In the case of the structure shown in Figure 16, a portion of the external surface of the sleeve guiding member 16a (16b) doubles as the surface on which the sleeve 10 slides in the nip portion. In this case, the end holder 42b (42a) is stationary, whereas the sleeve 10 and flange 23b (23a) rotate together. Further, the peripheral surface of the portion of the end holder 42b (42) fitted in the flange 23b (23a), and the internal surface of the portion of the flange 23b (23a), in which a portion of the end holder 42b (42) is fitted, slide against each other, respectively. Therefore, a proper amount of gap is necessary between the aforementioned peripheral and internal surfaces of the end holder 42b (42a) and the flange 23b (23a); a proper amount of difference is necessary between the internal diameter c of the portion of the flange 23b (23a), in which a portion of the flange 23b (23a), in which a portion of the end holder 42a is fitted, and the external diameter d of the portion of the end holder 42b (42a), which fits into the flange 23b (23a).

Please amend the paragraph beginning at page 59, line 16 and ending at line 19, as follows.

A referential code ~~12~~ 22 designates a rigid pressure application stay, which is put through the sleeve 11, being placed in contact with the inward surface of the sleeve guide 16c.

Please amend the paragraph beginning at page 59, line 20 and ending at page 60, line 8, as follows.

--A referential code ~~13~~ 30 designates a pressing member, which in this embodiment is an elastic pressure roller comprising a metallic core 30a and an elastic layer 30b. The elastic layer 30b is formed of silicone rubber or the like, and is coated on the peripheral surface of the metallic core 30a to reduce the hardness of the pressure roller 30. The pressure roller 30 is located between the unshown front and rear plates of the chassis of the fixing apparatus, being rotationally supported by the unshown front and rear plates, with the interposition of bearings, by the lengthwise ends of the metallic core 30a. In order to improve the surface properties, the peripheral surface of the elastic layer 30b may be covered with a layer 30c of fluorinated resin, for example, PTFE, PFA, or FEP.--

Please amend the paragraph beginning at page 61, line 4 and ending at line 11, as follows.

--In order to reduce the friction between the bottom surface of the ceramic heater 12 and the internal surface of the sleeve 10 in the fixing nip N, the bottom surface of the ceramic heater 12 is covered with a lubricous member ~~40~~ 440, or lubricant such as heat resistant grease is placed between the bottom surface of the ceramic heater 12 and the internal surface of the sleeve 10.--

Please amend the paragraph beginning at page 62, line 9 and ending at line 14, as follows.

--Referring to Figure 19, the sleeve 11 is made up of a base layer ~~201~~ 204, an elastic layer 202, and a release layer 203. For the durability of the sleeve 11, the base layer ~~201~~ 204 is formed of 60 μm thick stainless steel film, instead of resin film, for example, PI film, which has been commonly used.--

Please amend the paragraph beginning at page 62, line 15 and ending at page 63, line 13, as follows.

--The elastic layer 202 is provided to improve the color image fixing performance of the sleeve 11. Thus, in the case of a ~~black-and-white~~ black-and-white printer, the provision of the elastic layer 202 is not mandatory. In other words, the provision of the elastic layer 202 is optional. In this embodiment, silicone rubber which is 10 degree in hardness (JIS-A), and 4.18606×10^{-1} [W/m/°C] (1×10^{-3} [cal/cm.sec.deg.]) in thermal conductivity, is used to form the elastic layer ~~2~~ 202 with a thickness of 200 μm. The release layer 203 is a 20 μm thick painted layer of PFA, although it may be a piece of PFA tube similar to the one used in the first embodiment. The method of forming the release layer 203 by painting PFA over the elastic layer ~~2~~ 202 is superior to the method for forming the release layer ~~3~~ 203 with use of PFA tube, in that the former can form a thinner release layer ~~3~~ 203, and in that a release layer formed by painting is superior to a release layer formed with the use of PFA tube, in terms of the ability to press on the toner particles on the transfer medium P without disturbing the toner particles. On the other hand, a release layer formed of PFA tube is superior in mechanical and electrical strength than a release layer formed of painted PFA. Therefore, the selection between two methods may be made according to circumstances.--